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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,374	11/03/2003	Kia Silverbrook	YUI90US	1139
24011	7590	06/29/2005	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			STEPHENS, JUANITA DIONNE	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/698,374	SILVERBROOK, KIA
	Examiner Juanita D. Stephens	Art Unit 2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on Amendment filed 4/5/2005.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7,9-11 and 16 is/are rejected.  
 7) Claim(s) 8 and 12-15 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 03 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 10/160,273.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 and 9-11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashino et al. (US 6,007,187).

Kashino discloses a nozzle arranged for an inkjet printhead (as seen in Figs. 1 and 2), the nozzle arrangement including: 1) a nozzle chamber (located above heat generating element 2) for holding ink, 2) an actuator (heat generating element 2/moveable member 6) in fluid communication with the nozzle chamber, the actuator being movable with respect to the nozzle chamber upon actuation, 3) a fluid ejection port (11) in fluid communication with the nozzle chamber for allowing ejection of ink upon movement of an operative portion of the actuator relative to the nozzle chamber during actuation, the fluid ejection port defining an ejection axis generally perpendicular to a plane within which the fluid ejection port is disposed (col 11, Ins 14-22; Ins 39-46r), 4) an inlet channel (liquid flow path 3b) in fluid communication with the nozzle chamber for supplying ink thereto from an ink supply (col 10, Ins 38-41), 5) wherein the inlet channel is positioned for supplying ink to refill the nozzle chamber at a position radially displaced from the ejection axis (as seen in Figs. 1 and 2), 6) wherein the inlet channel (3b) is orientated such that the ink enters the nozzle chamber along an inlet axis that is

substantially parallel to, but displaced from the ejection axis (as seen in Figs. 1 and 2), 7) wherein the fluid ejection port (11) is formed in a roof portion (orifice plate 14) that at least partially defines the nozzle chamber, the nozzle arrangement being configured such that, upon actuation, an operative portion of the actuator is moved relative to the fluid ejection port, thereby causing the ink to be ejected from the fluid ejection port (col 11, Ins 14-22, Ins 39-46), 8) at least part of the operative portion of the actuator defines a roof portion (14) that at least partially defines the nozzle chamber and the fluid ejection port is formed in the roof portion, wherein the nozzle arrangement is configured such that, upon actuation, the roof portion, and thereby the fluid ejection port, are moved relative to the nozzle chamber, thereby causing the ink to be ejected (50) from the fluid ejection port (col 11, Ins 14-22, Ins 39-46), 9) upon return of the actuator to a quiescent position after actuation the ejection of the ink through the fluid ejection port (11), the nozzle chamber refilled with ink via the inlet channel (3b) (col 12, Ins 11-23), 10) wherein the nozzle chamber is refilled with ink from the inlet channel due to a reduction in pressure within the nozzle chamber caused by surface tension of a concave ink meniscus across the fluid ejection port after ink ejection (col 12, Ins 11-23), 11) wherein the actuator is a thermal actuator (heat generating element 2), 12) wherein the actuator is moveable within a plane upon actuation, the plane intersecting and being parallel with the ejection axis (as seen in Figs. 1 and 2), 13) wherein the actuator is mounted to flex about an anchor point (5b) upon actuation (col 10, Ins 52-53), 14) wherein the inlet channel (3b) is located in a plane that is parallel to both the inlet channel axis and the ejection axis and which intersects both axes (as seen in Figs. 1

and 2), and 15) wherein the actuator (2/6) is rotatably moved about a pivot region (fulcrum 6b) upon actuation and the inlet channel is disposed closer to the pivot region than to the ejection port (as seen in Figs. 1 and 2).

***Allowable Subject Matter***

3. Claims 8 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 13-15 will after claim 12 has been rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

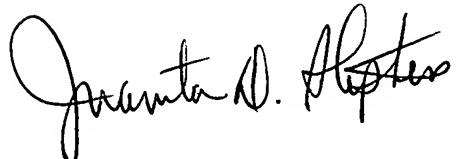
4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JS

June 27, 2005

Juanita D. Stephens  
Primary Examiner  
Art Unit 2853